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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,027	02/20/2004	Youichi Tei	09619/100L153-US1	1726
7278	7590	12/06/2004	EXAMINER	
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			RESAN, STEVAN A	
			ART UNIT	PAPER NUMBER
			1773	
DATE MAILED: 12/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,027

Applicant(s)

TEI ET AL.

Examiner

Stevan A. Resan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/912,449.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-20-2004
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Applicant's election without traverse of claims 6-16 in the reply filed on 13 September 2004 is acknowledged.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 7,8,10,11,14,15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a resin dried by vacuum at an elevated temperature, does not reasonably provide enablement for drying a resin under ordinary pressure even at elevated temperature. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to obtain the benefits of the invention (properties recited in these claims) commensurate in scope with these claims. Claims 5 and 6 recite alternate methods of drying i.e. drying under ordinary pressure and drying under vacuum. However as made clear in the specification pg 14 line 15 - pg 15 line 63 and embodiments 11, 16, and 23 (See Tables 4,5 and 6). Drying pellets under ordinary pressure (even at elevated temperatures) does not produce an injection molded substrate that attains the properties of these claims.

4. Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure that is not enabling.

The details of the head surface structure, protective layer structure and lubricant which are critical or essential to the practice of the invention, but not included in the

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claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

The durability of a magnetic disk is dependent upon the structure and tribologic properties of the two interactive surfaces and any lubricant present between the surfaces. While the surface properties of the substrate MAY effect durability, it is the surface properties of the head contact surface that ultimately determine the effect on the property. i.e. the surface properties of the substrate are not necessarily the same as the surface properties of the protection layer contacting the head. The claim therefore fails to define the metes and bounds of the invention since one of ordinary skill could not determine the scope of the claim lacking these other details.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 9 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no definition of a "rugged portion" nor an objective method of
measurement for this property cited in the specification.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Brekner et al US 5439722. (See Col 8 lines 15-18 where Brekner et al teach the drying at 80 C.) Note that process limitations in article claims carry no weight unless they can be demonstrated to produce a patentable article.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9, 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brekner et al US 5439722 and what was known by one of ordinary skill in the art at the time of the invention as described in the Background section of the specification.

It would have been obvious to one of ordinary skill in the art to use the substrate of Brekner in a magnetic recording medium structure as in claim 12 since this was a typical structure as was well known in the art as shown by the Background section of the specification and a way to lower manufacturing costs. The property claimed in claims 9, 13 appears to be present on the surface of the medium of Brekner et al. and since no means of measurement have been provided, the numerical limitations are meaningless.

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11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hirata et al. US 6333089 is cited for teaching that the surface roughness of a molded substrate (thermoplastic norborene in example 1) for a magnetic disk is determined by the surface finish on the mold. (Col 4 lines 47-56).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is 571-272-1513. The examiner can normally be reached on Tues-Thurs from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones, can be reached at 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



STEVAN A. RESAN
PRIMARY EXAMINER